

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference BZ04-86WOIC	FOR FURTHER ACTION	see Form PCT/ISA/220 as well as, where applicable, item 5 below.
International application No. PCT/KR 2004/003175	(Earliest) Priority Date (<i>day/month/year</i>) 5 December 2003 (05.12.2003)	International filing date (<i>day/month/year</i>) 3 December 2004 (03.12.2004)
Applicant LG ELECTRONICS INC.		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 4 sheets.

It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 - The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).
- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see continuation of this first sheet.

2. Certain claims were found unsearchable (see continuation of this first sheet)

3. Unity of invention is lacking (see continuation of this first sheet)

4. With regard to the title,

- the text is approved as submitted by the applicant.
- the text has been established by this Authority to read as follows:

5. With regard to the abstract,

- the text is approved as submitted by the applicant.
- the text has been established, according to Rule 38.2(b), by this Authority as it appears in the continuation of this first sheet. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the drawings,

- a. the figure of the drawings to be published with the abstract is Figure No. 1
 - as suggested by the applicant.
 - as selected by this Authority, because the applicant failed to suggest a figure.
 - as selected by this Authority, because this figure better characterizes the invention.
- b. none of the figures is to be published with the abstract.

A. CLASSIFICATION OF SUBJECT MATTER

IPC⁷: H04B 7/26, H04L 1/18, 12/26, H04Q 7/30, H04L 12/56

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC⁷: H04B 7/26, H04Q /30, H04L 1/18, 12/26, 12/56Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
----Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
EPODOC, PAJ, WPI

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 1 248 417 A2 (SAMSUNG ELECTRONICS CO., LTD) 9 October 2002 (09.10.2002) <i>abstract, [0047] - [0062], claims, figures 1-3f.</i>	1
A	EP 1 244 240 A2 (LG ELECTRONICS INC.) 25 September 2002 (25.09.2002) <i>abstract, [0095] - [0148], claims, figures 1-9.</i>	1, 8
A	EP 1 156 617 A1 (MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD) 21 November 2001 (21.11.2001) <i>abstract, claims, figure 5.</i>	1

 Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search 25 May 2005 (25.05.2005)	Date of mailing of the international search report 9 June 2005 (09.06.2005)
Name and mailing address of the ISA/ AT Austrian Patent Office Dresdner Straße 87, A-1200 Vienna	Authorized officer ERBER H.
Facsimile No. +43 / 1 / 534 24 / 535	Telephone No. +43 / 1 / 534 24 / 410

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2003/0125037 A1 (BEOM-SIK BAE et al.) 3 July 2003 (03.07.2003) <i>abstract, claims, figures 1, 2.</i> --	1
A	US 2003/0039267 A1 (CHANG-HOI KOO et al.) 27 February 2003 (27.02.2003) <i>abstract, claims, figure 2.</i> --	1
A	US 2002/0015388 A1 (DAE-GYUN KIM et al.) 7 February 2002 (07.02.2002) <i>abstract, [0003] - [0033], figure 3.</i> --	1
A	US 2002/0136286 A1 (CHANG-HOI KOO) 26 September 2002 (26.09.2002) <i>abstract, claims, figure 3.</i> ----	1

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Patent document cited in search report	Publication date	Patent family member(s)			Publication date
EP A 1156617		US A1 2004062222			2004-04-01
		JP A 2004007686			2004-01-08
		US A1 2001055290			2001-12-27
		CN A 1323123			2001-11-21
		CA A1 2348137			2001-11-17
		JP A 2001358699			2001-12-26
EP A2 1244240	2002-09-25	US A1 2005058154			2005-03-17
		CN A 1376000			2002-10-23
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		KR A 2003021937			2003-03-15
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		RU C2 2237365			2004-09-27
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		WO A1 02080406			2002-10-10
		JP T 2004528769T			2004-09-16
		CA A1 2408161			2002-10-10
US A 20020015 388		none			
US A 20020136 286		none			
US A 20030039 267		none			
US A 20030125 037		none			